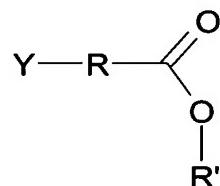


CLAIMS

5 1- Method of preparation of 1,3-diphenylprop-2-en-1-one derivatives substituted by a carboxyalkyloxy or carboxyalkylthio group, comprising the following steps :

(i) contacting at least one 1,3-diphenylprop-2-en-1-one derivative substituted on one of the two phenyl groups by a hydroxyl or thiol group with at least one halogenated compound represented by general formula (II) :



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in which Y represents a halogen atom, R is a C1-C24 alkyl chain and R' is an acid-labile protective group of carboxylic acid;

(ii) acid hydrolysis of the ester obtained in step (i).

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2- Method according to claim 1, characterized in that the carboxylic acid protective group of the compound represented by formula (II) is selected from among acid-labile groups of the C1 to C5 alkyl type substituted at the carbon atom linked to the carboxylic function by one or two linear or branched alkyl groups containing from 1 to 4 carbon atoms.

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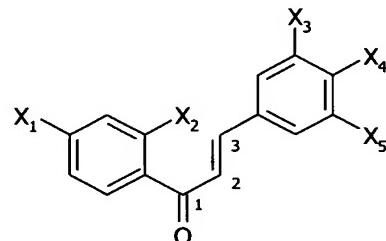
3- Method according to either one of claims 1 or 2, characterized in that the carboxylic acid protective group of the compound represented by formula (II) is selected from among tert-butyl and isopropyl groups.

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4- Method according to any one of claims 1, 2 or 3, characterized in that the R group is a C1-C10 alkyl chain, optionally substituted by one or more hydrocarbon groups, saturated, linear or cyclic containing from 1 to 12 carbon atoms.

- 5- Method according to any one of the previous claims, characterized in that step
(i) is carried out at a temperature comprised between 25 and 120°C and more
preferably between 80 and 120°C.
- 5 6- Method according to any one of the previous claims, characterized in that step
(i) is carried out in the presence of a catalyst.
- 10 7- Method according to any one of the previous claims, characterized in that step
(i) is carried out in the presence of cesium or potassium carbonate as catalyst.
- 15 8- Method according to any one of the previous claims, characterized in that step
(i) is repeated by several additions of the halogenated compound represented by
general formula (II) and if necessary of the catalyst.
- 20 9- Method according to any one of the previous claims, characterized in that the
1,3-diphenylprop-2-en-1-one derivative substituted by a hydroxyl or thiol group,
which is used in step (i) is obtained by a Claisen-Schmidt reaction in acidic or
basic medium of a compound of the type acetophenone with a thio- or hydroxy-
benzaldehyde derivative, or of a thio- or hydroxy-acetophenone derivative with a
compound of the benzaldehyde type.
- 25 10- Method according to any one of the previous claims, characterized in that acid
hydrolysis step (ii) is carried out by contacting a 1,3-diphenylprop-2-en-1-one
derivative substituted by an alkyloxycarbonylalkyloxy or alkyloxycarbonylalkylthio
group with trifluoroacetic acid.
- 30 11- Method according to any one of the previous claims, characterized in that the
amount of trifluoroacetic acid which is used in step (ii) is from 1 to 20 equivalents,
and preferably from 8 to 12 equivalents.
- 12- Method according to any one of the previous claims, characterized in that step
(ii) is carried out at a temperature of 0 to 100°C and more preferably 18 to 25°C.

13- Method according to any one of the previous claims, characterized in that the product so prepared is represented by the following general formula :



(I)

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in which :

X1 represents a halogen or a -R1 group or a group corresponding to the following formula : -G1-R1;

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X2 represents a hydrogen atom or a thionitroso group or an alkyloxy group or an alkylcarbonyloxy group or an alkylthio group or an alkylcarbonylthio group;

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X3 represents a -R3 group or a group corresponding to the following formula : - G3-R3;

X4 represents a halogen or a thionitroso group or a -R4 group or a group corresponding to the following formula : -G4-R4;

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X5 represents a -R5 group or a group corresponding to the following formula : - G5-R5;

R1, R3, R4, R5, which are the same or different, represent a hydrogen atom or an alkyl group substituted or not by a carboxylic acid function;

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G1, G3, G4, G5, which are the same or different, represent an oxygen or sulfur atom;

with one of the groups X1, X3, X4 or X5 corresponding to the formula -G-R, in which R is an alkyl group containing a carboxylic acid function.